

PROPOSED AQUATIC MOSQUITO CONTROL NPDES PERMIT



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March 9, 2010

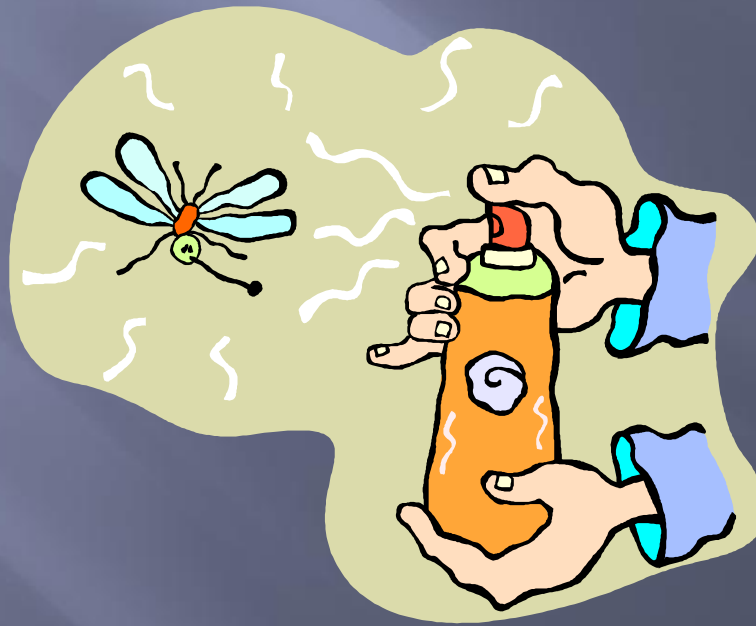
Why is a permit needed?

- ▣ (2001) *Headwaters, Inc. v. Talent Irrigation District*
 - Discharge of pesticides to surface water without a Clean Water Act permit is illegal.

- ▣ (2009) *National Cotton Council et al. v. EPA*
 - Even though pesticides are regulated under FIFRA, the discharge of pesticides to surface water is not exempt from Clean Water Act permitting requirements. Discharge of pesticides without a Clean Water Act permit is illegal.

What Doesn't Need A Permit?

Spraying for mosquitoes if the spray does not get into (discharge) surface water.



Permit History

- ▣ 2002, Ecology issued a permit for the discharge of pesticides to control mosquito larva. It did not address discharges of pesticides to control adult mosquitoes. Permit re-issued in 2007.
- ▣ Why the previous permit only authorized the discharge of larvicides.
 - The most effective form of mosquito control and
 - Significantly less toxic than the insecticides being used to control adult mosquitoes.

Proposed Permit Intent

- ▣ Continue to authorize the discharge of pesticides to control larval (pre-adult) mosquitoes
- ▣ Authorize the incidental discharge of pesticides to control adult, disease carrying (vector) mosquitoes to protect public health from West Nile virus and other mosquito-borne diseases (both human and animal).

Permit Comparison

CURRENT PERMIT

- ▣ Authorizes larvicides only
- ▣ DOES NOT authorize the discharge use of any pesticides for killing adult mosquitoes
- ▣ Washington Department of Health is Permittee

PROPOSED PERMIT

- ▣ Authorizes larvicides
- ▣ Authorizes the incidental discharge of pesticides to kill adult mosquitoes for vector control
- ▣ Mosquito control entities are Permittees

Nuisance Mosquito Control

Spraying for adult nuisance mosquitoes does not require a Clean Water Act permit provided the pesticide does not get into surface water.

This permit does not authorize the discharge to surface waters of pesticides associated with spraying for adult nuisance mosquitoes.

Vector Mosquito Control

- ▣ Vector: An organism that carries disease from one animal to another.
- ▣ Vector mosquitoes are:
Those species known by Washington Department of Health, in the state of Washington, to be disease carriers
- ▣ Vector mosquitoes can transmit disease such as West Nile Virus.



Spraying for Adult Vector Mosquitoes

- ▣ Mosquito Control Districts (MCDs) determine when spraying for adult mosquitoes is necessary for vector control provided that they:
 - Conduct mosquito surveillance,
 - Mosquito disease testing,
 - Monitor other disease indicators and
 - Meet DOH Alert Level 3 Criteria

- ▣ In non-MCD areas, WA DOH will make the determination that spraying is necessary.

WA DOH Alert Level 3 Criteria

- ▣ Spring, summer or fall and
- ▣ Areas with initial confirmation of mosquito-borne virus activity in birds before August, or
- ▣ A confirmed equine and/or human case, or
- ▣ Sustained mosquito-borne virus activity in birds and/or mosquitoes.



Spraying Criteria

- ▣ Permit conditions look to the MCD to implement the basic practices of an Integrated Pest Management Plan,
- ▣ Use of more effective control methods to prevent problems
 - larvicides to control larval mosquitoes at the source before they become biting adults
- ▣ Target adult spraying where there are disease problems.

Adulticides

Allowed for use to control vector mosquitoes:

- ▣ Pyrethroids
 - Permethrin
 - Sumithrin
 - Resmethrin
 - Natural Pyrethrins
- ▣ Organophosphates
 - Malathion and Naled for cases of documented pesticide resistance in a specific vector mosquito population
- ▣ Additives
 - Piperonyl Butoxide as a synergist



Why Isn't Only Following Label Language Adequate?

- ▣ A pesticide label is not a substitute for a Clean Water Act permit.
 - This means any incidental discharge of pesticides to water when spraying for adult mosquitoes is currently illegal, even when protecting human health from disease.
 - The only way that getting spray into surface water is legal is with a Clean Water Act permit.
 - Without a permit, getting spray into surface water also leaves the spraying entity at risk of third party lawsuit under the federal Clean Water Act.

- ▣ The insecticides used for adult mosquito control are extremely toxic to aquatic organisms, even at very small amounts
- ▣ In order to balance human health concerns due to disease, and environmental health concerns, discharges are limited by the permit.



Questions??

- ▣ Comments can be submitted via email until 5:00pm on March 17, 2010 to jonathan.jennings@ecy.wa.gov.
- ▣ Comments mailed to Ecology must be received no later 5:00pm on March 17, 2010 to be considered. Please mail to:

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